

What Is Claimed Is:

1. A toy comprising:

a plurality of stackable blocks, each block having a memory for storage of at least one  
5 computer program instruction, wherein when said plurality of stackable blocks are mechanically  
stacked, a plurality of instructions are electrically connected forming a computer program;  
a computer electrically connected to receive said computer program; and  
a robot connected to said computer, said computer controlling said robot in response to  
said computer program.

10 2. The toy of claim 1 wherein each stackable block comprises:

A non-volatile memory having at least one computer program instruction stored therein.

3. The toy of claim 2 wherein each stackable block comprises:

15 a rigid member having a first surface with a plurality of protrusions thereon and a second  
face, opposite to said first surface having a plurality of receptacles;  
wherein said plurality of protrusions for mechanically stacking one stackable block to the  
plurality of receptacles of another stackable block, and said plurality of receptacles for receiving  
the plurality of protrusions of another stackable member.

20 4. The toy of claim 3 wherein each stackable block further comprises:

a port for connecting to another stackable block;  
wherein said another stackable block having a memory for storage of an (un)conditional  
branching computer program instruction; and  
25 wherein said port for connecting to said (un)conditional branching computer program  
instruction.

5. The toy of claim 3 wherein each stackable block further comprises:

a port for connecting to another stackable block; and  
30 wherein said port for connecting to said computer program instruction of said another  
stackable block.

6. The toy of claim 3 wherein said plurality of protrusions of a first stackable block are electrically connected to said plurality of receptacles of a second stackable block when said first and second stackable blocks are mechanically connected.

7. The toy of claim 6 wherein said non-volatile memory of a stackable block is electrically connected to said plurality of protrusions of said stackable block.

8. The toy of claim 6 wherein said non-volatile memory of a stackable block is electrically connected to said plurality of receptacles of said stackable block.

9. The toy of claim 6 wherein each stackable block is substantially rectilinearly shaped.

10. The toy of claim 8 wherein said plurality of protrusions and plurality of receptacles of each stackable block are asymmetrically shaped.

11. The toy of claim 6 further comprising:

a main block; wherein said main block has a rigid member having a first surface with a plurality of protrusions thereon;

wherein said plurality of protrusions for mechanically stacking a stackable block thereon.

12. The toy of claim 11 wherein said plurality of protrusions of said main block are electrically connected to a plurality of receptacles of a rigid member of said stackable block when said main block and said stackable block are mechanically connected.

13. The toy of claim 6 further comprising:

a main block; wherein said main block has a rigid member having a first surface with a plurality of receptacles thereon;

wherein said plurality of receptacles for mechanically stacking a stackable block thereon.

14. The toy of claim 13 wherein said plurality of receptacles of said main block are electrically connected to a plurality of protrusions of a rigid member of said stackable block when said main block and said stackable block are mechanically connected.

5 15. The toy of claim 1 further comprising:

a main block;

wherein said computer is in said main block, said main block configured such that when said stackable blocks can be mechanically stacked on said main block, and said computer electrically connected to receive said computer program.

10 16. The toy of claim 15 wherein said robot is electrically connected to said main block.

17. The toy of claim 15 wherein said robot is wirelessly connected to said main block.

15 18. The toy of claim 1 wherein said computer is in said robot, and said computer for receiving said computer program and for controlling said robot in response to said computer program.

19. The toy of claim 1 wherein said computer has a compiler associated therewith for  
20 compiling said computer program to produce a compiled computer program and for controlling said robot in response to said compiled computer program.

20. The toy of claim 1 wherein said computer has an interpreter associated therewith for  
25 interpreting said computer program to produce an interpreted computer program and for controlling said robot in response to said interpreted computer program.

21. A stackable block comprising:

a rigid member having a first surface with a protrusion thereon and a second surface having a receptacle;

30 wherein said protrusion for mechanically stacking one stackable block to the receptacle of another stackable block, and said receptacle for receiving the protrusion of another stackable member;

a memory for storage of at least one computer program instruction, wherein when said plurality of stackable blocks are mechanically stacked, a plurality of instructions are electrically connected forming a computer program.

- 5 22. The stackable block of claim 21 wherein said rigid member has a plurality of protrusions and a plurality of receptacles.
23. The stackable block of claim 22 wherein said first surface and said second surface are substantially opposite to one another.
- 10 24. The stackable block of claim 23 wherein said memory is a non-volatile memory for the storage of at least one instruction.
25. The stackable block of claim 24 wherein said non-volatile memory stores a plurality of instructions.
- 15 26. The stackable block of claim 24 wherein said non-volatile memory further stores a copyright protected work.
- 20 27. The stackable block of claim 24 wherein said non-volatile memory is electrically connected to said plurality of protrusions.
28. The stackable block of claim 24 wherein said non-volatile memory is electrically connected to said plurality of receptacles.
- 25 29. The stackable block of claim 23 wherein said rigid member is substantially rectilinearly shaped.
- 30 30. The stackable block of claim 22 wherein said plurality of protrusions and plurality of receptacles of each stackable block are asymmetrically shaped.
31. The stackable block of claim 21 further comprising:

a port for connecting to another stackable block;  
wherein said another stackable block having a memory for storage of an (un)conditional  
branching computer program instruction; and  
wherein said port for connecting to said (un)conditional branching computer program  
5 instruction.

32. The stackable block of claim 21 further comprising:

a port for connecting to another stackable block;  
wherein said another stackable block having a memory for storage of a computer  
10 program instruction; and  
wherein said port for connecting to said computer program instruction.

33. A block for a toy comprising:

a board having a first surface adapted to fit into a stack of one or more blocks each block  
15 having non-volatile memory for the storage of one or more computer program instructions  
forming a computer program; and  
a computer, in said board, for receiving said computer program from said stack when said  
stack is fitted to said board, and for executing said computer program.

20 34. The block of claim 33 wherein said board having a plurality of protrusions on said first  
surface, said protrusions adapted to fit into said stack.

35. The block of claim 33 wherein said board having a plurality of receptacles on said first  
surface, said receptacles adapted to fit into said stack.

25 36. The block of claim 33 further comprising a compiler associated with said computer for  
compiling said computer program from said stack to generate a compiled computer program and  
for executing said compiled computer program.

30 37. The block of claim 33 further comprising an interpreter associated with said computer for  
interpreting said computer program from said stack to generate an interpreted computer program  
and for executing said interpreted computer program.